

RFP B3404RFP009-3X
Questions & Answers
September 7, 1999

Cover Letter

No additional questions at this time

Attachment 1 – Descriptive Information

No additional questions at this time

Attachment 2 – Functional Requirements

No additional questions at this time

Attachment 3 – Proposal Preparation Instructions

A3-9 **Reference:** Technical Proposal (Volume I), and Appendix A, Matrix 1, System Architecture Summary, and Matrix 2, Baseline Characteristics.

Question:

(a) Attachment #3, page 4, says that Section 1, Overview, must contain the completed Matrix 1 and Matrix 2. The description of Matrix 1, page 25, says that it is for the Initial, Interim, Final Secure, and Final Switchable. Are we correct to assume that you also want Matrix 1 one for the Final Open System?

(b) The description of Matrix 2, page 26, describes Matrix 2 as the Final System Baseline Characteristics. However, it also says that Matrix 2 shall be completed for the Initial System as well as the Final System and the Final Switchable System. We do not believe that this table makes sense for the initial system, and would like clarification on whether or not it is to be completed for the initial system. In addition, do you want Matrix 2 for the Final Open System?

(c) On page 11 of Attachment #3, the format for describing the Final Switchable System is addressed. Are we correct that the same matrices that discuss the Final Switchable System and are included the Section 1, Overview, are also to be supplied in Section 3.a?

Response:

(a) Yes. Matrix 1 should be completed for the 4.5 TeraOPS Final Open System.

(b) Your assessment of the usefulness of Matrix 2 for the Initial System is correct. Therefore, Matrix 2 *should not* be completed for the Initial System and reference to it in the introductory paragraph of Matrix 2 should be deleted.
Yes, we do want Matrix 2 completed for the 4.5 TeraOPS Final Open System.

(c) Yes, you are correct. The same matrices that discuss the Final Switchable System and are included the Section 1, Overview, are also to be supplied in Section 3.a.

A3-10 **Reference:** Section B.2.c.5 Timeline and Section B.3.f Timeline also requests the information that was in Matrix 1.

Question: We are assuming that you want the quantity of components being delivered at each part of the delivery, but are not really interested in the latencies, memory size, cross reference, or things of that nature. Is this interpretation correct?

Response: The above interpretation is *incorrect*. The Laboratory does want all of the information contained in the "Description" column of Matrix 1 to be shown on the Timeline. We are interested in both the quantity of components being delivered as well as the configuration of each part of the system delivery.

Attachment 4 – Evaluation Criteria

No questions at this time

Attachment 5 – Model Subcontract

No additional questions at this time.

Sample Applications

APPS-4 **Reference:** JTPACK

Question: Please describe the technique used to determine that the SGI results provided for JTPACK are correct. Was the code run on several other platforms and a consensus reached? Or were the results analyzed for numeric correctness? Is the customer aware that the SGI output when iout=6 contains NaN's and denormalized numbers? Does the customer still believe that requiring 4-5 significant digits of agreement with SGI is necessary to illustrate correctness?

Please provide the TFQMR-none-2_1, TFQMR-none-2_1.dat, BCGS-none-2_1, BCGS-none-2_1.dat, GMRES10-none-2_1 & GMRES10-none-2_1.dat files for two runs: one with the default jtpack90.in and the other with iout=6.

Response: The NaNs are printed as a result of a (JT) programming error using an uninitialized array in subroutine StoppingTest. However, this array, and thus the NaNs, have nothing to do with the results of the test or the answers as required by the RFP.

The NaNs can be eliminated by including the Fortran90 source line "W = 0.0" as the first executable statement in the file "StoppingTest-guts.F90" in the JTPack90 "include" directory.

The results published were achieved on SGI equipment. The same results were also achieved on another architecture. They are correct and in agreement to at least 5 decimal places. The University believes that requiring 4 to 5 decimal places of agreement with the published answers is a necessary requirement for proving correctness.

The files you requested will be provided on the ASCI web site through the JTPACK Sample Application link. These files were created using the Fortran 90 source line correction mentioned above. The additional files are: TFQMR–none–2_1, TFQMR–none–2_1.dat, BCGS–none–2_1, BCGS–none–2_1.dat, GMRES10–none–2_1 & GMRES10–none–2_1.dat files for two runs: one with the default jtpack90.in and the other with iout=6.